

## REMARKS

As mentioned above, all pending claims have been rejected under 35 U.S.C. § 102(b) and 112. The Applicant believes these rejections are inappropriate and requests that they be removed. Further, the Applicant has amended certain claims and now requests that all pending claims be allowed.

The recent rejections under 35 U.S.C. § 102(b) are based upon two newly identified references – U.S. Patent 5,506,715, Mihara et al. and U.S. Patent 5,303,250, Masuda et al. Initially, it is noteworthy, that neither of these references relates to noise reduction, although they may each contain general comments regarding noise considerations. Further, neither of these references are related to laser sources used in optical data storage drives. Simply stated, these references discuss technologies which are in no way related to the invention of the present application.

As indicated in a previous amendment, the present invention involves noise reduction through the use of a feedback circuit which effectively cancels noise signals at certain levels. This approach provides less noise in the optical signal which is utilized for reading information from an optical storage medium. The feedback circuit provides a signal which is simply combined with the laser driver to provide a straightforward simple solution which produces a noise-free optical signal.

Claims 1-39 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Masuda et al. As can be seen from reviewing the Masuda reference, the concepts taught therein relate to the control of a pump laser to produce an output matched to a desired level. Most significantly, the Masuda et al. reference does not discuss or disclose a noise reduction feedback network as contemplated by the present application. Stated alternatively, Masuda et al. does not disclose or teach the combination of elements and their relationships as claimed in the present application.

Again, Masuda et al. deals with the control of a pump laser. More specifically, the Masuda system includes a laser diode driven to provide an optical signal to an oscillator. The oscillator has a predetermined frequency spectrum which is directly related to the desired output of the pump laser. Utilizing an appropriate filter, the oscillator will output an optical signal at the second harmonic frequency of the oscillator. This output is then provided to a partially reflective mirror which thus produces an output signal and a feedback signal. The feedback

signal is provided to a comparator whose output is fed back into the pump laser in order to control the amplitude of the pump laser.

Masuda et al. does identify problems related to noise, however, this noise source is unrelated to the invention of the present application. More specifically, Masuda et al. discusses noise caused by reflection of light back to the laser diode. *See, col. 6, lines 40-47.* Masuda states that this noise is suppressed by the feedback loop, however, does not discuss how this suppression is achieved. More importantly, noise suppression is clearly a supplemental result, and not the primary purpose for the feedback loop.

The Mihara et al. reference was also used to reject claims 1-39. As a starting point, this reference relates to technology so divergent and unrelated so that it should be considered as only background information at best. More specifically, Mihara et al. relates to an optical telecommunication system which utilizes a pair of optical transmitter receiver mechanisms to communicate optical signals. Generally speaking, the system utilized for communication monitors, noise levels on the optical signals and, if above desired levels, changes the operating frequencies. Simply stated, these devices detect noise and then adjust operating modes if necessary. More importantly, these systems do not even remotely attempt to correct or minimize noise.

Neither of the above cited references suggest or teach the elements of the present invention, as combined and claimed. Consequently, they cannot be used to support a rejection under 35 U.S.C. § 102(b). Of note, these systems do not include a noise reduction feedback network which provides a feedback signal to the laser diode. Consequently, all pending claims are allowable over these references.

In addition to the above-referenced objections, the Examiner rejected claims 1-39 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. This rejection was identical to the one previously presented. Consequently, the Applicant can only assume that the Applicant's remarks were not considered given the one-sentence response to arguments provided in the recent Office Action. In that one-sentence response, the Examiner indicated that the arguments were considered, but were moot in view of new grounds of rejection. However, the rejections under 35 U.S.C. § 112 were simply a repeat of those previously provided. Consequently, the Applicant is unsure as to the exact nature of these rejections and asked for further clarification.

In light of the above claim amendments and comments, the Applicant submits that claim 1-39 are allowable over the cited references and ask that these claims be passed to issuance.

Applicants note that a supplemental information disclosure statement was filed on January 7, 2004. While applicants believe all presently pending claims are allowable, consideration of these references is requested.

Should the Examiner have any questions regarding the above referenced comments and, it is respectfully requested that the undersigned be contacted via telephone to expeditiously deal with any issues. It is believed that no fees are due at this time, however, the Commissioner is hereby authorized to charge any amount due to our Deposit Account No. 50-1901.

Respectfully submitted,

By 

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